THE SUPPLEMENT

To a Small

TREATISE

Called

Salt-water SWEETNED:

SHEWING

The Great Advantages

BOTH BY

SEA and by LAND,

OF

SEA-WATER made FRESH.

TOGETHER

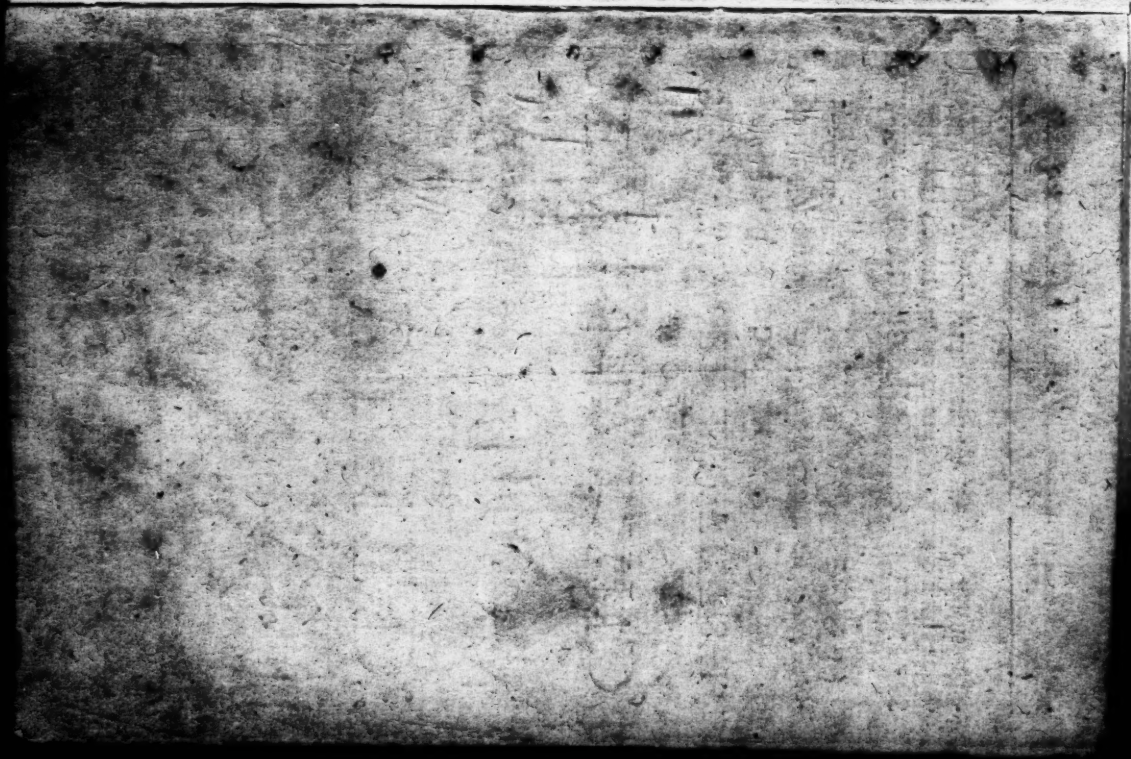
With the Honourable Mr. *BOYLE'S* Letter, and the Approbation of the *COLLEDGE* of *PHYSICIANS*, of the *Wholsomness* of this WATER.

And also the CONDITIONS on which the PATENTEES and others concern'd, do intend to contract with such as shall please to deal with them for the Use of this INVENTION.

The Eighth Edition, *July* 23.

LONDON,

Printed by *John Harefinch* in *Mountague-Court*



TO THE KING'S Most Excellent Majesty.

SIR,

WHEN *Mr.* Boyle, *with my Partners, and my self attended Your Majesty with the Experiment of Reducing* Salt Water *into* Fresh; *your Majesty seem'd so well pleased with an Invention of that Universal Benefit, that We cannot but with our Humblest Duty, acknowledge your Gracious Reception of it; However, as your Great Wisdom and Judgment is not easie to be surpriz'd, and your Royal Approbation never known to be your hasty Act of Grace;*

your Favour and Patronage was not fully obtain'd, till with the ſtricteſt Scrutiny you had firſt examin'd thoſe Hopes and Probabilities, you vouchſaf'd to incourage in Us.

But, when upon further conſideration, We had obviated all Difficulties, and ſolv'd all Objections againſt this Undertaking, (which We hope will appear in this Printed Paper,) your Majeſty was Graciouſly pleas'd to give us your Approbation, and to Order us your Letters Patents, *which Grace and Favour, ought to be, and is receiv'd by Us with the deepeſt ſenſe of our humble Acknowledgments and Gratitude.*

And if the Fruits of your Royal Grant has not hitherto been deriv'd to Us, 'tis partly by ſome Obſtacles we met from the ſuggeſtions of a private Perſon, but more eſpecially by the late Horrid Conſpiracy, *when, not only our Loyal apprehenſions for your Majeſties Danger, diverted our Thoughts from all other Concerns, but likewiſe we judged it a part of our Duty not to be preſſing on your Majeſties Goodneſs, or on your Miniſters of State, in ſo Important a juncture of Affairs: But having now*

regained Leisure and Freedom after the dissipation of the greatest part of our Fears, We presume a second time to lay these Endeavours at your Feet, as best Entituled to the Patronage of so great an Undertaking by Your own Subjects, and best able to Recommend it to the World by your Royal Approbation.

This Experiment is in a great degree owing to the Eminent Mr. Boyle, *and indeed well worthy so Ingenious a Promoter, being so much the more the Favorite of his happy* Genius, *as it is Universally useful to Mankind; But whatever Advantages this Country, or indeed the World, may receive by it, his whole Ambition is bounded in the publick Profit, contenting himself with no other Benefit from it, than the satisfaction and pleasure of seeing it accomplish'd by his Friends.*

The advantages in regard to Navigation, *especially in long Voyages, which are subject (through often Calms, and on several other accounts,) to distress for want of Water, and the Benefits to Sea-Towns, which are incommodated by Brackish Wa-*

ters, Together with the Eaſineſs, Cheapneſs, and Wholeſomneſs of this prepared Water, are the principal ſcope of theſe enſuing Papers, which are Humbly Dedicated to your Majeſties Peruſal, Favour, and further Approbation, by

Your Majeſties moſt Dutiful

and Obedient Subject,

R. FITZGERALD.

The

The fore-going Dedication, Humbly offered to His Majesty, *having discovered the Intention of this Undertaking; it remains now to satisfie all Reasonable Scruples which have been raised concerning the Wholesomness and Cheapness of* Water *thus prepared.*

The *Queries* and *Answers* follow.

Quest. 1. IF *this* Water *can be made in sufficient quantities to serve the Uses of any Ship at Sea?*

Ans. About Ninety Gallons may be Prepared in every Twenty four Hours by an Instrument of 33 Inches Diameter, which will stand under the Deck of any Ship; and it's computed that less than three Quarts is a good Allowance for any man in that time: And if a large Ship, wherein there are many men aboard, should require more Water, then two or more of the Instruments may be had upon reasonable Terms, and one man may attend several of them.

Quest. 2. *In case the Operation be by* Fire, it *may require a Skilful* Chymist, *or one knowing in such Operations, to be on Board every Ship, who will require great Wages.*

Anſ. There will be no occaſion for any ſuch Perſon, for any Sea-man may be Inſtructed in an Hour or two to prepare this Water.

Queſt. 3. *It's probable that the* Engine *may be frequently out of Order, and being ſo at Sea, where Artificers and Tools are wanting to repair it, there muſt neceſſarily follow want of* Water, *which will be of Ill Conſequence.*

Anſ. This *Engine* is of ſuch Contrivance, that it's never likely to be out of Order.

Q. 4. *Can this* Engine *be of uſe in Stormy-weather?*

Anſ. Since a ſufficient quantity of Freſh-water may be ſo eaſily had by this *Engine*, the Mariners will be careful to make a good Proviſion of it before-hand; however 'tis not to be doubted but it will anſwer the worſt Accidents of the greateſt Storms, and have its Effect ſufficiently in the worſt Weather, eſpecially conſidering that in ſuch deſperate Extremities men muſt be content with ſmaller Allowances.

Queſt. 5. *The Operation being by* Fire, *it may endanger the Ship, and the Smoak be very offenſive?*

Anſ. The *Engine* may eaſily be placed in any Ship without danger of *Fire*, or offence of Smoak.

Queſt. 6. *Will not the Charge of this Inſtrument and Materials belonging to it be very great?*

Anſ. It is difficult to make exact Anſwer to this, but an Inſtrument of the largeſt Size, with all the Materials belonging to it, will not amount to above 18 pound, and may laſt many years,

and according to the Rates of Ships, they may be proportion'd both in Bulk and Price. And where it may be thought neceſſary to make uſe of this Experiment on Shore, for Brewing, or other uſes of a Family, Inſtruments and Materials may be very large, and very much cheaper on Shore, than at Sea.

Queſt. 7. *Will not the Fewel be very Chargeable, and take up much room in the Ship?*

Anſ. The quantity of about ninety Gallons of Water, may be prepared with leſs than three pecks of Coals, and proportionably with any other Fire; and the whole Room that will be taken up in the Fire, and in the few Casks to be imployed in the making and receiving this Water, will be leſs than the tenth part of Stowage now employed for Water onely, and upon a ſtrict Computation made by the Perſons concern'd in this Grant, the whole charge of Water will come to leſs than an half penny *per* Gallon.

Queſt. 8. *Will not the Ingredients take up much Room, and be very Chargeable?*

Anſ. A Veſſel leſs then a Barrel may contain enough of the Ingredients to carry a Ship to the Eaſt *Indies* and back again; and the Ingredients for near one hundred Gallons of this *Sea-water* will not amount to above 12 Pence, and will be cheaper when great quantities are uſed at Land.

Queſt.

Queſt. 9. *Admitting this Preparation of Water may be made, and in ſufficient Quantities, it may be doubted whether it be wholſome?*

Anſ. The Famous Lord *Bacon*, having written learnedly of this Subject, had not the leaſt thought that the Sea-Water, after it had been Diſ-ſalted, without any Noxious addition, was Unwholeſome: and it neither now is, nor ever was really doubted whether it were wholeſome; However, becauſe invidious Perſons, who are no well-wiſhers to Ingenious Deſigns, may poſſibly raiſe Scruples, the Gentlemen who are concerned in this Grant, have purpoſely, to give Publick Satisfaction, ſent a large quantity of this Water to Doctor *King*, a very Ingenious Phyſician, who is a Member of the *Colledge*, and of the *Royal Society*; who finds,

1. That it is Lighter than moſt of the Waters about the Town.

2. That it is without Sediment, and Tranſparent as any other Waters.

3. That it Lathers (as they call it) with *Waſh-Ball* or *Soap*, better than other Water, and with leſs *Soap*.

4. That *Sugar* diſſolveth ſooner in it, than in other *Water*.

5. That it *Evaporates* ſooner than common *Water*.

6. That whereas common *Water* Putrifies and yields a Stinking Smell within a few Weeks,

this

this has continued Sweet and unaltered ſeveral Months, and may yet do ſo much longer, being ſtill in as good condition as it was above Eight months ago, *November* the Fifteenth, 1683.

7. That it makes *Gellies* as firm and good as any Water.

8. That it Boils Peaſe to Tenderneſs, Beef, Mutton, Fiſh, and all other Meat, without giving it an ill *Taſte* or *Colour*.

9. That it has no kind of ill *Taſte* in it ſelf, and Boils in *Milk* without Curdling.

10. That *Flowers*, *Plants*, and all *Vegetables* grow in it at leaſt as well as any other *Water*.

11. And that ſmall *Animals* live and grow in it.

Several men of great Quality, *viz.* The Earls of *Shrowsbury*, *Weſtmorland*, *Mulgrave* and *Burlington*, the Lord *Dunbar*, Lord *Lumley*, Lord *Falconbridge*, and Lord *Chumley*, beſides very many Gentlemen of Quality, who frequently drink Water, Officers of *Sea*, and *Phyſicians*, have *Drunk* of this *Water* without being in the leaſt indiſpos'd after it; but, leſt any doubts may remain after this, of the *Salubrity* of the ſaid *Water*, the following Teſtimonial of theſe Learned and Eminent *Phyſicians* is here inſerted. And a further account of new Experiments, made by an ingenious *Phyſician*, is now at the end of this Treatiſe Printed.

The

The Approbation of the Colledge of Physicians, *and other* Doctors *of* Physick, *Practising in and about* London.

WHereas we have received an account in a *Gazet* published some months since, that the Honourable *Robert Fitz-Gerald*, Esq; hath found out the way and means of reducing *Salt-water* into *Fresh*, in quantities sufficient to serve Ships at Sea. And for as much as some Persons may possibly make a doubt, if the said Water be wholsome after the Salt is taken out of it. We therefore, considering of what general Advantage this useful Experiment may be, having fully inform'd our selves from Mr. *Boyle*, that the said Experiment is made by Fire. And having also seen an account of some Experiments made by some Members of our own Body, do declare our Opinion, that We believe the said Water is very wholesome, and may be safely used. And being further acquainted by the said Mr. *Boyle*, that the very few Ingredients made use of in the said Operation, are fixed in the Fire, and give no noxious quality to the Water; We are therefore of Opinion that the same may be safely used, and is at least as healthy as any other Water us'd at Sea.

Sea. All which we certifie (at the Request of the Honourable *Robert Fitz-Gerald.*)

D. *Cox*, President,
Sir *C. Scarborough*, Knt.
Dr. *Daniel Whistler*,
D. *Weatherly*,
Dr. *Will. Denton*,
Sir *T. Millington* Knt.
Dr. *Walter Needham*,
Dr. *Thomas Short*,
Dr. *Thomas Allen*,
Dr. *Edmund Dickingson*,
Dr. *William Croone*,
Dr. *Richard Lower*,
Dr. *John Windebank*,
Dr. *Daniel Cox*,
Dr. *James Rufine*,
Dr. *Charles Conquest*,
Dr. *Edmund King*,
Dr. *Willoughby*,
Dr. *Tho. Sydenham*,
Dr. *Edward Tyson*,
Dr. *Nehemiah Grew*,
Dr. *David Abercromby*,
Dr. *Andrew Creagh.*

Though Phsiyck has always flourished in this Kingdom, yet in this Age it is in greater Perfection than ever; being improv'd, both as to the Practical and Speculative part, by the present Fellows of the Famous Colledge of Physicians; who, being Men of great Practise and Eminent Learning, cannot but give full satisfaction to all such as inquire concerning the healthfulness of this Water; Their Opinion being, in this particular, the more valuable, because it is to their own Disadvantage; since the Brackish Waters of the Sea-Coast, and the putrifying Waters made use of at Sea, might probably have afforded them a

number of Patients, which may hereafter be leſſened by the uſe of this wholeſome Water.

Since the firſt Edition of theſe Papers, his Majeſty has been pleas'd to ſee ſome Experiments, which has ſo convinc'd his Majeſty of the healthfulneſs of this Water, that he has reſolved to have it generally made uſe of in his Sea-Port Garriſons; of which an account has been given in ſeveral *Gazetts*, by His Majeſties ſpecial Order.

The Benefits and Advantages of Sea-Water *made* Freſh.

MUch Stowage will be ſaved, ſo that a Ship of 50 or 60 Tun, and proportionably of greater Bulk, may take in ſeveral Tuns of Goods more than formerly they uſed to carry; which will conſiderably advance the Trade of all Merchants, and be of vaſt profit to the Maſters or Owners of Ships.

The Charge of Casks is very conſiderable, eſpecially when bound with Iron, as all Sea-Casks muſt be; And by means of this Engine, three fourths of that charge will be ſaved.

The tear and wear of Boats often going from Ship-board, and frequent loſs of the Boat and men in Stormy Weather, and the Op[illegible] of the Sea-mens being Drunk or

ſhoar; by which many fatal accidents do happen, (by means of having this Water-Engine) will be prevented.

Ships in long Voyages have been forc'd to run many Leagues from their intended courſe, which much retards their Voyage, and makes them loſe fair Winds, and maintain more Sea-men at charges of Diet and Wages than they have occaſion for; which inconveniencies may be prevented by having Water within themſelves.

Ships are often forc'd to leave their Anchors and Cables behind them, by being forc'd into dangerous Shoars upon account of taking in Freſh Water.

In the *African*, *Eaſt* and *Weſt India* Voyages, great quantities of Freſh Water are neceſſary, which the Sea-men are forc'd to put above Deck for want of room, which is great hindrance to a Ships Sailing, and much endangers and weakens a Ship.

In caſe of Calms, which often happen in the narrow Seas, but eſpecially near the Line, this Inſtrument will be of vaſt advantage, by affording freſh and wholſome Water, inſtead of that which is unwholſome and offenſive.

Eſſex, *Kent*, and all other the Sea-Coaſts, in any part of the World, that want wholeſome Water, may be eaſily and cheaply ſupplied by this means; as alſo *Venus* *Amſterd*---

Yarmouth, and all other Towns or Places that lye near the Sea, and either want good, or have Brackish Water.

In time of War, whole Navies may be relieved by this Engine, and Opportunity given of making the greatest Discoveries imaginable.

It is further to be considered, that hitherto the richest and ablest bodied Sea-men have been averse from undertaking long Voyages, by reason of endangering their Healths, and Lives, by making use of putrified Water, which inconvenience is not now to be feared, their being such useful hopes of Fresh Water by the use of this Engine; and possibly a smaller number of men may serve the use of Ships than do at present, by which much Charges will be saved to the Masters and Owners of Ships; and Merchants may Trade upon easier Terms.

In *Portsmouth*, *Rochester*, the *Fenns* of *Lincolnshire*, and any other places near the Sea, where Waters are Brackish, and consequently unwholsome, this Engine, *&c.* may be very useful, and where there is room enough to place it, very great quantities of Water may be had for the use of whole Families, and the Ingredients when used in great quantities may be afforded at a cheaper Rate.

A LETTER

A LETTER of Mr. *BOYLE*'s to the Learn[ed] Dr. *JOHN BEALE*, Fellow of the *Royal* So[ciety], concerning *Fresh-water* made out of *Sea-water*: Printed at the desire of the Patentees.

SIR,

TO give you a short Account (suitable to the little time I have to do it in,) of the Transaction, which I suppose must have given the rise to the Mention made of my Name in the publick Gazette,: *I must inform you, that one of my neareſt Relations,* (*Captain* Fitz-Gerald,) *and some other Worthy Gentlemen, having acquainted his Majesty, that They had an Invention for making* Sea-water *sweet and wholsom in great quantity, and with small Charge, and that I had examin'd, and did approve the Water so prepar'd; His Majesty was pleas'd with very Gracious Expressions, to command Me to attend him with a further and more particular Information. Having readily obey'd this Order, and been made acquainted with the Objections the King thought fit to make againſt the Practicableness of the Invention; which, (tho a private Man had urg'd them,) I should think the most Judicious that have been fram'd against it; I humbly presented to him, that I look't upon this Invention as Comprizing two differing things; a* Mechanical *part, which related to the Engine it self, and the use of it a Ship-board, and a* Physical *part, which*

the Potableneſs and Wholſomneſs of the Liquour. About the former of theſe I did not pretend to clear the Difficulties, eſpecially ſuch ſtrong ones, as His Majeſty had propos'd; but left it to the Patentees *to give him Satisfaction, which they were in a readineſs to offer. But as to the Wholſomneſs of the prepar'd Water, I had made ſome Tryals upon the Liquour, which gave me no juſt Grounds of ſuſpecting it to be unwholſom, but ſeveral Motives to believe it well condition'd, and of great uſe to* Navigators, *and not to them only. And having hereupon briefly acquainted His Majeſty with the chief Tryals I had made to examin this* Sweetned Water, *He was pleas'd to look upon them as Satisfactory, and vouchſafed on that occaſion to Diſcourſe as a* Virtuoſo, *of the Sea and Brackiſh-waters, and gave me ſome new, as well inſtructive Obſervations about them: and in concluſion, diſmiſs'd the* Patentees *with a Gracious Promiſe of his Royal Protection, and peculiar Favour.*

To this ſhort Narrative it now remains, that I briefly Subjoyn the chief things that perſwaded me of the Salubrity of this Water, (whence may be juſtly and eaſily inferr'd, the Utility the Publick may receive by a cheap and eaſie way of preparing it.) Firſt, then I conſider'd that almoſt all the Rain-water that falls from the Clouds on the Main-Ocean, and which (except perhaps in very few Places in Torrid Climates) is unqueſtionably receiv'd as wholſom, muſt be afforded by the Sea, and conſe-

quently be but Sea-water freed from its Salt, (according to the famous Motto, Redit Agmine dulci.) Next I found, (as his Majesty himself had done,) that the Liquour was well tasted, and without any sensible Brackishness; and some of it continued for between 4 or 5 Months in a large Christal Bottle, that I purposely kept unstopt, and for the most part in a South Window, where it neither did, nor probably in a long time, will putrifie, or so much as appear troubled or less transparent; during which time, it was with Approbation tasted and smell'd by several Learned Physicians of the famous Colledge of London. Thirdly, I found it laver very well, which most Pump-waters, and many others that have some little (tho unperceiv'd) common Salt in them, will not do. Fourthly, this Water will boyl Pease tender, which amongst Seamen is one of the principal signs of good Water. Fifthly, In very good Ballances, with an Instrument that I purposely caus'd to be made for the nice weighing of Liquours, I found this Water far less heavy than one would expect; for if it differ'd at all in weight from the like quantity of undistill'd Water, (I speak with an If, because it is far more difficult to be exact in such nice Tryals, than the unpractic'd will imagine) the difference was not considerable, being but one part in 400, and that difference is very small in comparison of that which Navigators and learned Authors relate to be observable in natural Waters, all of them and

potable: I might tell you on this Occasion, that the last Great Duke of Tuscany, who was an Eminent Virtuoso, and the Patron of the celebrated Academy of the Lyncean Philosophers, is affirm'd, among other prudent Courses that he took for his Health, whereof he was very Sollicitous, to have constantly made use of distill'd Water, when he us'd any Water, for his own Drinking. And I could add other things favourable enough to the Patentees Water, if Haste, and perhaps Discretion too, did not oblige me to leave them yet unmention'd, that I might now have time to say somewhat of the main thing of all that convinced me of the Saltlesness of the Water I speak of. I consider'd then, Sixthly, that the thing that was aim'd at by those ingenious men, that at differing times, and in several Countries have attempted to make Sea-water sweet, and the thing that was requir'd by proposing Recompences, or otherwise to encourage the Makers of such Attempts, was to free the Sea-water from the Brackishness without any noxious Additament: so that on all sides it was taken for granted, that the only thing that kept the Sea-water from being safely Potable, was its Brackishness. From which reflection it was natural for Me to infer a Conclusion very favourable to our prepar'd Water. For having long since written a short Discourse of the Saltness of the Sea; I had been industrious to devise ways of comparing Waters in [illegible] of Brackishness. And by these I found th

Patentees *water to be more free from Common-salt, than Waters that are usually drunk here in* London, *of which I remember I shewed those Gentlemen an experiment that surpriz'd, as well as convinc'd them. And that which more satisfi'd me my self, was a Tryal that I carefully made by a way which having mention'd, but not yet (for want of opportunity) disclos'd to His Majesty, the Respect I owe Him forbids me to impart without His leave: On which account I hope you'll be content to be at present assur'd of these two Things; One, that by this way of Tryal, I found (what possibly you will think strange;) that if there were in Water, so much as one Grain of Salt, in above two Ounces of Water, I could readily discover it: The other, that even by this critical* Examen, *I could not detect so much as a thousandth part of Salt in Our Prepar'd Water; whereas I found by Tryals purposely and carefully made, that our* English *Sea-water contain'd a* 44, *or* 45*th part of good dry Salt; or, which is all one, that* 44 *Pints or near so many Pounds of* Marine *Water, would yield about one Pound of dry Common-Salt.*

Thus Sir, *you have a short and Art-less Account such as my haste will permit, and the nature of the Subject requires, of my part in promoting this profitable Invention; to which I own my self a great well-wisher, not out of any private Interest (the that was obligingly proffer'd me by the* Patentees *but as I think the bringing it into general use may prove a real Service to Mankind, upon the*

Score of divers Utilities and Advantages, which yet, (tho I had leisure,) I should think very needless to enumerate to so discerning a Person as Dr. B. to whom I shall therefore hasten to subscribe my self,

SIR,

A very Affectionate Friend,

and Humble Servant,

R. BOYLE.

AFter so many forcible and convincing Testimonies in favour of this great Design, I shall make an Addition of the Approbation of His Majesty of *Great Brittain*; who, after the publication of the first Impression, having seen the convincing Proofs of the healthful Quality of this Water, hath resolv'd to have the same to be made use of in all his Sea-Port Garisons; The which he caused to be published by express Order, in several Gazetts, and particularly in that of *Munday, Novemb.* 5. 1683.

An

An ABSTRACT out of the Gazette, Numb. 1676.

White-Hall Novemb. 2. 1683. HIS Majesty was pleas'd to Command the Honourable Mr. *Boyle* to attend Him, to give His Majesty an Ocular Proof of the Nicety of his way of examining the freshness and saltness of Water, and to apply it to the Sea-Water, prepar'd according to the Patentees Invention; which being done before his Majesty, his Royal Highness, and the Duke of *Grafton*, several Persons of Quality being also present, it was made apparent, by a certain prepar'd Liquid which Mr. *Boyle* had brought with him, that a Discovery could be made if there were so much as a thousandth part of Salt in a propos'd Water: By which Tryal His Majesty, finding that the Prepar'd Sea-Water, for which he has granted his Royal Patent, was at least as free from Salt as the best Waters used in this Town: received such Satisfaction as to the wholsomness of the said Water, that He was pleased to declare his Royal Intentions both to encourage the said Invention, and to have the said Water made use of in his several Maritime Garrisons, which Nature has not furnished with wholsom Water.

A Copy of a Letter from Captain *Macdonnel*, from aboard his Majesties Ship the *Greyhound*, near the Coast of *Spain*, to one of the Patentees of Sea-Water.

SIR,

FOR these Four Months past, I kept your Sea-Water (for its better Tryal) Buried in my Ships Hold, where, had it not been extraordinary good, it must infallibly have been of no use, and offensive, but I'll assure you it prov'd quite contrary; for yesterday, having several both of Sea and Land Officers on board of me, I made them insensibly taste of your Water, which I pretended to be from a Spring I watered my Ship at, Ten Leagues to the Southward of Sallie; *they all affirm'd it to be as good as* Tangier *Water, the very best counted in the* Streights, *but when I discovered the Water to be yours, they hardly would give it Credit, and approv'd of it (as really it is, as good as can be drank) which they desired me to let you know.*

I am

Novemb. 3. 1683. Your Humble Servant

The Extremity of the last Winter having occasioned the loss of the President, *a Rich* East-India *Ship, and many other of His Majesties Ships and Subjects to perish for want of* Provision *and* Fresh-Water *at* Sea, *His Majesty, for prevention of the like Misfortune, was pleased to Order the following Advice to be inserted in the* Gazette *of* March 6. 1683.

White-Hall, Feb. 28.

HIS Majesty having heard several Relations of the great Distress some of his Subjects have lately been in at Sea for want of fresh Water, hath been pleased for their Relief in such Cases, to command the Patentees for the new Invention of making Sea-water Fresh, to give the most publick notice they can of the Usefulness of the said Invention, of which his Majesty has received so great satisfaction, that his Majesty is pleased that those Instruments shall be provided for his Ships and Garrisons, where they are not naturally provided with good Water. And in obedience to His Majestics Order, the Patentees do hereby give notice, That two Treatises have been written on this subject, which may be had at the *Ship* against the *Royal Exchange*, and at the Marine Coffee-house, whereunto all Persons are referred for more particular Information; in which the great benefit and many Conveniences of this Invention, the easiness, both as to the Trouble and Expence, of making the Salt Water fresh, and the Wholsomness thereof, is clearly demonstrated by the Testimony of many Eminent Physicians. To which is added a Letter written by the Honourable Mr. *Boyle*, by which he

assures the Wholsomness, Durableness, and Sweetness of this Water. And a Letter from Captain *Rand. Macdonnel*, of the third of *November* 1683. from on Board the *Grey-hound* Frigat, near the Coast of *Spain*; wherein he affirms, that he kept of the Patentees Water, some that was given him, in his Ships Hold, from his leaving *England*, being four Months, and then having several Officers on Board him, gave them a taste of it, pretending it to be of the Spring near *Sally*, where he had watered, and which is as good as the best in the *Streights*, and they drank of it as such, till he discovered what it was; and then they approved of it to be as good as could be drank.

FINIS.

6/15 K with 12

The Conditions *upon which the* Patentees *for making* Salt *or* Brackiſh Water Freſh *and* Wholſom, *do intend to conclude with ſuch Perſons that ſhall pleaſe to agree with them for the Uſe of this* Invention *either by* Sea *or* Land. 7/2 9. 15

FIRST, Every Perſon deſiring to deal with the ſaid Patentees, may have one Engine or more, with its Appendances, together with Directions how to manage and place the ſame, paying for each Engine and its Appendances, that will make about Ninety Gallons of Water freſh in Twenty four Hours, the Sum of Eighteen Pounds.

Every one buying an Engine, is alſo to buy as much of the Ingredients for this Operation as will keep the ſame going at leaſt ſix

Months, at the Rate of one Shilling for as much as makes about ninety Gallons of Water.

Every one dealing for an Engine, and the quantity of Ingredients aforesaid, is to enter into Covenants with the Patentees by Articles indented under Hand and Seal, as followeth;

First, That he shall not sell or dispose of the said Engine or Ingredients, without License first had from the Patentees, *under their Hands and Seals.*

Secondly, That he shall not use, nor suffer the said Engine or Ingredients to be used on Shore, without License from the Patentees, *neither shall he directly or indirectly make, cause, or suffer to be made, any Engine in imitation of that of the* Patentees, *nor shall use any other Engine or Ingredients than what he shall buy of the* Patentees, *during the Grant of His Majesty to the said* Patentees, *without their License in Writing, under their Hands and Seals.*

Third

Thirdly, That when he hath expended the Quantity of Ingredients firſt bought, he will from time to time buy a like Quantity from the ſaid Patentees, *which they will be obliged to afford at the like Rate.*

Fourthly, That he will pay unto the ſaid Patentees, *as a* Præmium *for their Invention of this* Beneficial Art, *ſix pence the Tun yearly, for the Tunnage of every Ship, in which they ſhall carry an Engine, the one Maiety in hand, on the delivery of the Engine, and the other at ſix Months after.*

Fifthly, If any one ſells his Ship, or Intereſt in ſuch Ship, and deſires to be diſcharged of the afore-mentioned Covenants, bringing the Buyer, or ſome for him, to the Patentees *Office, and procuring him or ſome for him to enter into Articles of the like tenor, his Articles ſhall be delivered up cancell'd.*

If any one after the firſt Voyage ſhall not think it convenient to uſe the ſaid Engine

and Ingredients, returning to the Patentees, at the Office, their Engine and Appendances, with the Remainder of the Ingredients, not being damnified, he ſhall be diſcharged of the above Covenants, and repay'd the Moiety of the Money firſt paid for the Engines and Appendances, and alſo one Moiety according to the quantity of Ingredients returned as above.

If any Engine and Ingredients be uſed on Shore, the *Præmium* for each Engine ſhall be proportionably cheap, with reſpect to the advantages, the Parties agreeing with the Patentees may have by it, and they ſhall alſo covenant, not to uſe, or ſuffer to be uſed the ſaid Engine and Ingredients on Ship-board, without Licence from the Patentees.

Upon theſe Conditions, the Engine and Ingredients (which may be carried either by Sea or Land) together with the Directions for the Uſe thereof, ſhall be ready from and after the Twentieth day of *Auguſt* next, at the Patentees Office, kept in *Lothbury*, near the *Royal Exchange*, which will alwayes be open from Ten of the Clock in the Morning till One. And all Perſons who are willing to agree upon theſe Terms, may be pleaſed to ſubſcribe their Names, or to order ſome one for them to accept of theſe Conditions, for which Books ſhall be always ready

at the ſaid Office in *Lothbury*, and at Mr. *John Gandy's*, at the Sign of the Ship over againſt the *Royal Exchange*.

All the above Charges, together with the Price of Firing, and the Intereſt of the firſt coſt of the Engine and its Appendances, as alſo the *Præmium* being duely computed, the Water notwithſtanding will come under one half penny the Gallon, and the room which the Fewel takes up for Stowage, and the few Casks to be employed in the making and receiving this *Prepared Water*, will be leſs than the * tenth part of the Stowage now employ'd for Water only.

* *Vid.* Dr. Grew's Treatiſe, *called New Experiments*, fol. 14.

All Perſons deſirous to deal with the Patentees, whoſe Occaſions will not permit them to come to *London*, ſhall have the Agreements which are to be ſigned, ſent to ſuch convenient Places as the ſaid Parties ſhall deſire, which they may communicate to the Patentees by Letters to their Office in *Lothbury*.

All Parties who pleaſe to be further informed of the great Advantages they may receive by this Invention, (both as to Health and Profit) may have delivered to them two Treatiſes written on this Subject in moſt Languages now uſed, at the Patentees Office in *Lothbury*, or at the Ship in *Cornhil*, over againſt the *Royal Exchange*, *London*.

July 2. 1684.

THis Paper was agreed to, and ordered to be Printed and Publiſhed, by the Patentees, and others concern'd.

The Earl of Berkeley.

Lord Viſcount Falkland.

R. Fitzgerald. *W. Bridgeman.*

Nat. Johnſon. *P. Trant.*

Theo. Oglethorpe. *George Doddington.*

Tho. Maule.

ר